

Sequence Listing

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Gurney, Austin
Hillan, Kenneth
Kljavin, Ivar
Napier, Mary
Roy, Margaret
Tumas, Daniel
Wood, William

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<210> 15

<211> 737

<212> PRT

<213> Homo Sapien

<400> 15

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				20					25					30
Ser	Ser	Leu	Ala	Asn	Pro	Val	Pro	Ala	Ala	Pro	Leu	Ser	Ala	Pro
				35					40					45
Gly	Pro	Cys	Ala	Ala	Gln	Pro	Cys	Arg	Asn	Gly	Gly	Val	Cys	Thr
				50					55					60
Ser	Arg	Pro	Glu	Pro	Asp	Pro	Gln	His	Pro	Ala	Pro	Ala	Gly	Glu
				65					70					75
Pro	Gly	Tyr	Ser	Cys	Thr	Cys	Pro	Ala	Gly	Ile	Ser	Gly	Ala	Asn
				80					85					90
Cys	Gln	Leu	Val	Ala	Asp	Pro	Cys	Ala	Ser	Asn	Pro	Cys	His	His
				95					100					105
Gly	Asn	Cys	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asp	Gly	Tyr	Leu

110					115					120				
Cys	Ile	Cys	Asn	Glu	Gly	Tyr	Glu	Gly	Pro	Asn	Cys	Glu	Gln	Ala
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Leu	Pro	Ser	Leu	Pro	Ala	Thr	Gly	Trp	Thr	Glu	Ser	Met	Ala	Pro
				140					145					150
Arg	Gln	Leu	Gln	Pro	Val	Pro	Ala	Thr	Gln	Glu	Pro	Asp	Lys	Ile
				155					160					165
Leu	Pro	Arg	Ser	Gln	Ala	Thr	Val	Thr	Leu	Pro	Thr	Trp	Gln	Pro
				170					175					180
Lys	Thr	Gly	Gln	Lys	Val	Val	Glu	Met	Lys	Trp	Asp	Gln	Val	Glu
				185					190					195
Val	Ile	Pro	Asp	Ile	Ala	Cys	Gly	Asn	Ala	Ser	Ser	Asn	Ser	Ser
				200					205					210
Ala	Gly	Gly	Arg	Leu	Val	Ser	Phe	Glu	Val	Pro	Gln	Asn	Thr	Ser
				215					220					225
Val	Lys	Ile	Arg	Gln	Asp	Ala	Thr	Ala	Ser	Leu	Ile	Leu	Leu	Trp
				230					235					240
Lys	Val	Thr	Ala	Thr	Gly	Phe	Gln	Gln	Cys	Ser	Leu	Ile	Asp	Gly
				245					250					255
Arg	Ser	Val	Thr	Pro	Leu	Gln	Ala	Ser	Gly	Gly	Leu	Val	Leu	Leu
				260					265					270
Glu	Glu	Met	Leu	Ala	Leu	Gly	Asn	Asn	His	Phe	Ile	Gly	Phe	Val
				275					280					285
Asn	Asp	Ser	Val	Thr	Lys	Ser	Ile	Val	Ala	Leu	Arg	Leu	Thr	Leu
				290					295					300
Val	Val	Lys	Val	Ser	Thr	Cys	Val	Pro	Gly	Glu	Ser	His	Ala	Asn
				305					310					315
Asp	Leu	Glu	Cys	Ser	Gly	Lys	Gly	Lys	Cys	Thr	Thr	Lys	Pro	Ser
				320					325					330
Glu	Ala	Thr	Phe	Ser	Cys	Thr	Cys	Glu	Glu	Gln	Tyr	Val	Gly	Thr
				335					340					345
Phe	Cys	Glu	Glu	Tyr	Asp	Ala	Cys	Gln	Arg	Lys	Pro	Cys	Gln	Asn
				350					355					360
Asn	Ala	Ser	Cys	Ile	Asp	Ala	Asn	Glu	Lys	Gln	Asp	Gly	Ser	Asn
				365					370					375
Phe	Thr	Cys	Val	Cys	Leu	Pro	Gly	Tyr	Thr	Gly	Glu	Leu	Cys	Gln
				380					385					390
Ser	Lys	Ile	Asp	Tyr	Cys	Ile	Leu	Asp	Pro	Cys	Arg	Asn	Gly	Ala
				395					400					405

Thr Cys Ile Ser	Ser Leu Ser Gly Phe	Thr Cys Gln Cys Pro Glu	410	415	420
Gly Tyr Phe Gly	Ser Ala Cys Glu Glu	Lys Val Asp Pro Cys Ala	425	430	435
Ser Ser Pro Cys	Gln Asn Asn Gly Thr	Cys Tyr Val Asp Gly Val	440	445	450
His Phe Thr Cys	Asn Cys Ser Pro Gly	Phe Thr Gly Pro Thr Cys	455	460	465
Ala Gln Leu Ile	Asp Phe Cys Ala Leu	Ser Pro Cys Ala His Gly	470	475	480
Thr Cys Arg Ser	Val Gly Thr Ser Tyr	Lys Cys Leu Cys Asp Pro	485	490	495
Gly Tyr His Gly	Leu Tyr Cys Glu Glu	Glu Tyr Asn Glu Cys Leu	500	505	510
Ser Ala Pro Cys	Leu Asn Ala Ala Thr	Cys Arg Asp Leu Val Asn	515	520	525
Gly Tyr Glu Cys	Val Cys Leu Ala Glu	Tyr Lys Gly Thr His Cys	530	535	540
Glu Leu Tyr Lys	Asp Pro Cys Ala Asn	Val Ser Cys Leu Asn Gly	545	550	555
Ala Thr Cys Asp	Ser Asp Gly Leu Asn	Gly Thr Cys Ile Cys Ala	560	565	570
Pro Gly Phe Thr	Gly Glu Glu Cys Asp	Ile Asp Ile Asn Glu Cys	575	580	585
Asp Ser Asn Pro	Cys His His Gly Gly	Ser Cys Leu Asp Gln Pro	590	595	600
Asn Gly Tyr Asn	Cys His Cys Pro His	Gly Trp Val Gly Ala Asn	605	610	615
Cys Glu Ile His	Leu Gln Trp Lys Ser	Gly His Met Ala Glu Ser	620	625	630
Leu Thr Asn Met	Pro Arg His Ser Leu	Tyr Ile Ile Ile Gly Ala	635	640	645
Leu Cys Val Ala	Phe Ile Leu Met Leu	Ile Ile Leu Ile Val Gly	650	655	660
Ile Cys Arg Ile	Ser Arg Ile Glu Tyr	Gln Gly Ser Ser Arg Pro	665	670	675
Ala Tyr Glu Glu	Phe Tyr Asn Cys Arg	Ser Ile Asp Ser Glu Phe	680	685	690
Ser Asn Ala Ile	Ala Ser Ile Arg His	Ala Arg Phe Gly Lys Lys			

695	700	705
Ser Arg Pro Ala Met Tyr Asp Val Ser	Pro Ile Ala Tyr Glu Asp	
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Tyr Ser Pro Asp Asp Lys Pro Leu Val Thr	Leu Ile Lys Thr Lys	
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Asp Leu

<210> 16
 <211> 43
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Oligonucleotide Probe

<400> 16
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<210> 17
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Oligonucleotide Probe

<400> 17
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<210> 18
 <211> 508
 <212> DNA
 <213> Homo Sapien

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 tctgtgacta agtctattgt ggctttgctg ttaactctgg tggagaagg 200
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 aagatgggag caatttcacc tgtgtttgcc ttcttggtta tactggagag 450
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taggggag 508

<210> 19

<211> 508

<212> DNA

<213> Homo Sapien

<400> 19

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aagatgggag caatttcacc tgtgtttgcc ttctgggtta tactggagag 450
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taggggag 508

<210> 20

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 20

ctctggaagg tcacggccac agg 23

<210> 21

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 21

ctcagttcgg ttggcaaagc tctc 24

<210> 22

<211> 69

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 22

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gctttgccaa ccgaactga 69

<210> 23

<211> 1520

<212> DNA

<213> Homo Sapien

<400> 23

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gcccacacca tgccggggcac ctacgtctcc tcgaccacac tcagtagtcc 150

cagcaccacag ggccctgcaag agcaggcacg ggccctgatg cgggacttcc 200

cgctcgtgga cggccacaac gacctgcccc tggctcctaag gcagggttac 250

cagaaagggc tacaggatgt taacctgcgc aatttcagct acggccagac 300

cagcctggac aggccttagag atggcctcgt gggcgcccag ttctggtcag 350

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gcttgtgacc tcggctaaag ctctgaacga cactcagaaa ttggcctgcc 500

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<210> 24

<211> 433

<212> PRT

<213> Homo Sapien

<400> 24

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Pro	Leu	Val	Asp	Gly	His	Asn	Asp	Leu	Pro	Leu	Val	Leu	Arg	Gln	35	40	45	
Val	Tyr	Gln	Lys	Gly	Leu	Gln	Asp	Val	Asn	Leu	Arg	Asn	Phe	Ser	50	55	60	
Tyr	Gly	Gln	Thr	Ser	Leu	Asp	Arg	Leu	Arg	Asp	Gly	Leu	Val	Gly	65	70	75	
Ala	Gln	Phe	Trp	Ser	Ala	Tyr	Val	Pro	Cys	Gln	Thr	Gln	Asp	Arg	80	85	90	
Asp	Ala	Leu	Arg	Leu	Thr	Leu	Glu	Gln	Ile	Asp	Leu	Ile	Arg	Arg	95	100	105	
Met	Cys	Ala	Ser	Tyr	Ser	Glu	Leu	Glu	Leu	Val	Thr	Ser	Ala	Lys	110	115	120	
Ala	Leu	Asn	Asp	Thr	Gln	Lys	Leu	Ala	Cys	Leu	Ile	Gly	Val	Glu	125	130	135	
Gly	Gly	His	Ser	Leu	Asp	Asn	Ser	Leu	Ser	Ile	Leu	Arg	Thr	Phe	140	145	150	
Tyr	Met	Leu	Gly	Val	Arg	Tyr	Leu	Thr	Leu	Thr	His	Thr	Cys	Asn	155	160	165	
Thr	Pro	Trp	Ala	Glu	Ser	Ser	Ala	Lys	Gly	Val	His	Ser	Phe	Tyr	170	175	180	

Asn Asn Ile Ser Gly Leu Thr Asp Phe Gly Glu Lys Val Val Ala	185	190	195
Glu Met Asn Arg Leu Gly Met Met Val Asp Leu Ser His Val Ser	200	205	210
Asp Ala Val Ala Arg Arg Ala Leu Glu Val Ser Gln Ala Pro Val	215	220	225
Ile Phe Ser His Ser Ala Ala Arg Gly Val Cys Asn Ser Ala Arg	230	235	240
Asn Val Pro Asp Asp Ile Leu Gln Leu Leu Lys Lys Asn Gly Gly	245	250	255
Val Val Met Val Ser Leu Ser Met Gly Val Ile Gln Cys Asn Pro	260	265	270
Ser Ala Asn Val Ser Thr Val Ala Asp His Phe Asp His Ile Lys	275	280	285
Ala Val Ile Gly Ser Lys Phe Ile Gly Ile Gly Gly Asp Tyr Asp	290	295	300
Gly Ala Gly Lys Phe Pro Gln Gly Leu Glu Asp Val Ser Thr Tyr	305	310	315
Pro Val Leu Ile Glu Glu Leu Leu Ser Arg Gly Trp Ser Glu Glu	320	325	330
Glu Leu Gln Gly Val Leu Arg Gly Asn Leu Leu Arg Val Phe Arg	335	340	345
Gln Val Glu Lys Val Gln Glu Glu Asn Lys Trp Gln Ser Pro Leu	350	355	360
Glu Asp Lys Phe Pro Asp Glu Gln Leu Ser Ser Ser Cys His Ser	365	370	375
Asp Leu Ser Arg Leu Arg Gln Arg Gln Ser Leu Thr Ser Gly Gln	380	385	390
Glu Leu Thr Glu Ile Pro Ile His Trp Thr Ala Lys Leu Pro Ala	395	400	405
Lys Trp Ser Val Ser Glu Ser Ser Pro His Met Ala Pro Val Leu	410	415	420
Ala Val Val Ala Thr Phe Pro Val Leu Ile Leu Trp Leu	425	430	

<210> 25

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 25
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<210> 26
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 26
 cgtgatggtg tctttgtcca tggg 24

<210> 27
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 27
 ctccaccaat ccgatgaac ttgg 24

<210> 28
 <211> 50
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 28
 gagcagattg acctcatagc ccgatgtgt gcctcctatt ctgagctgga 50

<210> 29
 <211> 1416
 <212> DNA
 <213> Homo Sapien

<400> 29
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 aaaaccaag gacacc 1416

<210> 30

<211> 446

<212> PRT

<213> Homo Sapien

<400> 30

Met	Pro	Gly	Thr	Tyr	Ala	Pro	Ser	Thr	Thr	Leu	Ser	Ser	Pro	Ser
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			20						25					30
Pro	Leu	Val	Asp	Gly	His	Asn	Asp	Leu	Pro	Leu	Val	Leu	Arg	Gln
			35						40					45
Val	Tyr	Gln	Lys	Gly	Leu	Gln	Asp	Val	Asn	Leu	Arg	Asn	Phe	Ser

50					55					60				
Tyr	Gly	Gln	Thr	Ser	Leu	Asp	Arg	Leu	Arg	Asp	Gly	Leu	Val	Gly
				65					70					75
Ala	Gln	Phe	Trp	Ser	Ala	Tyr	Val	Pro	Cys	Gln	Thr	Gln	Asp	Arg
				80					85					90
Asp	Ala	Leu	Arg	Leu	Thr	Leu	Glu	Gln	Ile	Asp	Leu	Ile	Arg	Arg
				95					100					105
Met	Cys	Ala	Ser	Tyr	Ser	Glu	Leu	Glu	Leu	Val	Thr	Ser	Ala	Lys
				110					115					120
Ala	Leu	Asn	Asp	Thr	Gln	Lys	Leu	Ala	Cys	Leu	Ile	Gly	Val	Glu
				125					130					135
Gly	Gly	His	Ser	Leu	Asp	Asn	Ser	Leu	Ser	Ile	Leu	Arg	Thr	Phe
				140					145					150
Tyr	Met	Leu	Gly	Val	Arg	Tyr	Leu	Thr	Leu	Thr	His	Thr	Cys	Asn
				155					160					165
Thr	Pro	Trp	Ala	Glu	Ser	Ser	Ala	Lys	Gly	Val	His	Ser	Phe	Tyr
				170					175					180
Asn	Asn	Ile	Ser	Gly	Leu	Thr	Asp	Phe	Gly	Glu	Lys	Val	Val	Ala
				185					190					195
Glu	Met	Asn	Arg	Leu	Gly	Met	Met	Val	Asp	Leu	Ser	His	Val	Ser
				200					205					210
Asp	Ala	Val	Ala	Arg	Arg	Ala	Leu	Glu	Val	Ser	Gln	Ala	Pro	Val
				215					220					225
Ile	Phe	Ser	His	Ser	Ala	Ala	Arg	Gly	Val	Cys	Asn	Ser	Ala	Arg
				230					235					240
Asn	Val	Pro	Asp	Asp	Ile	Leu	Gln	Leu	Leu	Lys	Lys	Asn	Gly	Gly
				245					250					255
Val	Val	Met	Val	Ser	Leu	Ser	Met	Gly	Val	Ile	Gln	Cys	Asn	Pro
				260					265					270
Ser	Ala	Asn	Val	Ser	Thr	Val	Ala	Asp	His	Phe	Asp	His	Ile	Lys
				275					280					285
Ala	Val	Ile	Gly	Ser	Lys	Phe	Ile	Gly	Ile	Gly	Gly	Asp	Tyr	Asp
				290					295					300
Gly	Ala	Gly	Lys	Phe	Pro	Gln	Gly	Leu	Glu	Asp	Val	Ser	Thr	Tyr
				305					310					315
Pro	Val	Leu	Ile	Glu	Glu	Leu	Leu	Ser	Arg	Gly	Trp	Ser	Glu	Glu
				320					325					330
Glu	Leu	Gln	Gly	Val	Leu	Arg	Gly	Asn	Leu	Leu	Arg	Val	Phe	Arg
				335					340					345

Gln	Val	Glu	Lys	Val	Gln	Glu	Glu	Asn	Lys	Trp	Gln	Ser	Pro	Leu	
				350					355					360	
Glu	Asp	Lys	Phe	Pro	Asp	Glu	Gln	Leu	Ser	Ser	Ser	Cys	His	Ser	
				365					370					375	
Asp	Leu	Ser	Arg	Leu	Arg	Gln	Arg	Gln	Ser	Leu	Thr	Ser	Gly	Gln	
				380					385					390	
Glu	Leu	Thr	Glu	Ile	Pro	Ile	His	Trp	Thr	Ala	Lys	Leu	Pro	Ala	
				395					400					405	
Lys	Trp	Ser	Val	Ser	Glu	Ser	Ser	Pro	His	Pro	Asp	Lys	Thr	His	
				410					415					420	
Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	
				425					430					435	
Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr					
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<210> 31

<211> 1790

<212> DNA

<213> Homo Sapien

<400> 31

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<210> 32

<211> 422

<212> PRT

<213> Homo Sapien

<400> 32

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Pro	Pro	Pro	Leu	Leu	Pro	Leu	Leu	Leu	Leu	Leu	Cys	Val	Leu	Gly
			20					25						30

Ala	Pro	Arg	Ala	Gly	Ser	Gly	Ala	His	Thr	Ala	Val	Ile	Ser	Pro
			35					40						45

Gln	Asp	Pro	Thr	Leu	Leu	Ile	Gly	Ser	Ser	Leu	Leu	Ala	Thr	Cys
			50					55						60

Ser Val His Gly Asp	Pro Pro Gly Ala Thr	Ala Glu Gly Leu Tyr	65	70	75
Trp Thr Leu Asn Gly	Arg Arg Leu Pro Pro	Glu Leu Ser Arg Val	80	85	90
Leu Asn Ala Ser Thr	Leu Ala Leu Ala Leu	Ala Asn Leu Asn Gly	95	100	105
Ser Arg Gln Arg Ser	Gly Asp Asn Leu Val	Cys His Ala Arg Asp	110	115	120
Gly Ser Ile Leu Ala	Gly Ser Cys Leu Tyr	Val Gly Leu Pro Pro	125	130	135
Glu Lys Pro Val Asn	Ile Ser Cys Trp Ser	Lys Asn Met Lys Asp	140	145	150
Leu Thr Cys Arg Trp	Thr Pro Gly Ala His	Gly Glu Thr Phe Leu	155	160	165
His Thr Asn Tyr Ser	Leu Lys Tyr Lys Leu	Arg Trp Tyr Gly Gln	170	175	180
Asp Asn Thr Cys Glu	Glu Tyr His Thr Val	Gly Pro His Ser Cys	185	190	195
His Ile Pro Lys Asp	Leu Ala Leu Phe Thr	Pro Tyr Glu Ile Trp	200	205	210
Val Glu Ala Thr Asn	Arg Leu Gly Ser Ala	Arg Ser Asp Val Leu	215	220	225
Thr Leu Asp Ile Leu	Asp Val Val Thr Thr	Asp Pro Pro Pro Asp	230	235	240
Val His Val Ser Arg	Val Gly Gly Leu Glu	Asp Gln Leu Ser Val	245	250	255
Arg Trp Val Ser Pro	Pro Ala Leu Lys Asp	Phe Leu Phe Gln Ala	260	265	270
Lys Tyr Gln Ile Arg	Tyr Arg Val Glu Asp	Ser Val Asp Trp Lys	275	280	285
Val Val Asp Asp Val	Ser Asn Gln Thr Ser	Cys Arg Leu Ala Gly	290	295	300
Leu Lys Pro Gly Thr	Val Tyr Phe Val Gln	Val Arg Cys Asn Pro	305	310	315
Phe Gly Ile Tyr Gly	Ser Lys Lys Ala Gly	Ile Trp Ser Glu Trp	320	325	330
Ser His Pro Thr Ala	Ala Ser Thr Pro Arg	Ser Glu Arg Pro Gly	335	340	345
Pro Gly Gly Gly Ala	Cys Glu Pro Arg Gly	Gly Glu Pro Ser Ser			

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<210> 37
<211> 300
<212> PRT
<213> Homo Sapien

<400> 37

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Val	Cys	Ser	Leu	Glu	Ser	Phe	Val	Lys	Leu	Phe	Ile	Pro	Lys	Arg	20	25	30	
Arg	Lys	Ser	Val	Thr	Gly	Glu	Ile	Val	Leu	Ile	Thr	Gly	Ala	Gly	35	40	45	
His	Gly	Ile	Gly	Arg	Leu	Thr	Ala	Tyr	Glu	Phe	Ala	Lys	Leu	Lys	50	55	60	
Ser	Lys	Leu	Val	Leu	Trp	Asp	Ile	Asn	Lys	His	Gly	Leu	Glu	Glu	65	70	75	
Thr	Ala	Ala	Lys	Cys	Lys	Gly	Leu	Gly	Ala	Lys	Val	His	Thr	Phe	80	85	90	
Val	Val	Asp	Cys	Ser	Asn	Arg	Glu	Asp	Ile	Tyr	Ser	Ser	Ala	Lys	95	100	105	
Lys	Val	Lys	Ala	Glu	Ile	Gly	Asp	Val	Ser	Ile	Leu	Val	Asn	Asn	110	115	120	
Ala	Gly	Val	Val	Tyr	Thr	Ser	Asp	Leu	Phe	Ala	Thr	Gln	Asp	Pro	125	130	135	
Gln	Ile	Glu	Lys	Thr	Phe	Glu	Val	Asn	Val	Leu	Ala	His	Phe	Trp	140	145	150	
Thr	Thr	Lys	Ala	Phe	Leu	Pro	Ala	Met	Thr	Lys	Asn	Asn	His	Gly	155	160	165	
His	Ile	Val	Thr	Val	Ala	Ser	Ala	Ala	Gly	His	Val	Ser	Val	Pro	170	175	180	
Phe	Leu	Leu	Ala	Tyr	Cys	Ser	Ser	Lys	Phe	Ala	Ala	Val	Gly	Phe	185	190	195	
His	Lys	Thr	Leu	Thr	Asp	Glu	Leu	Ala	Ala	Leu	Gln	Ile	Thr	Gly				

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Val Lys Thr Thr	Cys Leu Cys Pro Asn	Phe Val Asn Thr Gly	Phe		
	215		220		225
Ile Lys Asn Pro	Ser Thr Ser Leu Gly	Pro Thr Leu Glu Pro	Glu		
	230		235		240
Glu Val Val Asn	Arg Leu Met His Gly	Ile Leu Thr Glu Gln	Lys		
	245		250		255
Met Ile Phe Ile	Pro Ser Ser Ile Ala	Phe Leu Thr Thr Leu	Glu		
	260		265		270
Arg Ile Leu Pro	Glu Arg Phe Leu Ala	Val Leu Lys Arg Lys	Ile		
	275		280		285
Ser Val Lys Phe	Asp Ala Val Ile Gly	Tyr Lys Met Lys Ala	Gln		
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<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 38

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<210> 39

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 39

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<210> 40

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 40

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<210> 41

<211> 1377

<212> DNA

<213> Homo Sapien

<400> 41

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<210> 42

<211> 243
 <212> PRT
 <213> Homo Sapien

<400> 42

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His	Pro	Gly	Leu	Pro	Gly	Thr	Pro	Gly	His	His	Gly	Ser	Gln	Gly	35	40	45	
Leu	Pro	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Ala	Pro	Gly	50	55	60	
Ala	Pro	Gly	Glu	Lys	Gly	Glu	Gly	Gly	Arg	Pro	Gly	Leu	Pro	Gly	65	70	75	
Pro	Arg	Gly	Asp	Pro	Gly	Pro	Arg	Gly	Glu	Ala	Gly	Pro	Ala	Gly	80	85	90	
Pro	Thr	Gly	Pro	Ala	Gly	Glu	Cys	Ser	Val	Pro	Pro	Arg	Ser	Ala	95	100	105	
Phe	Ser	Ala	Lys	Arg	Ser	Glu	Ser	Arg	Val	Pro	Pro	Pro	Ser	Asp	110	115	120	
Ala	Pro	Leu	Pro	Phe	Asp	Arg	Val	Leu	Val	Asn	Glu	Gln	Gly	His	125	130	135	
Tyr	Asp	Ala	Val	Thr	Gly	Lys	Phe	Thr	Cys	Gln	Val	Pro	Gly	Val	140	145	150	
Tyr	Tyr	Phe	Ala	Val	His	Ala	Thr	Val	Tyr	Arg	Ala	Ser	Leu	Gln	155	160	165	
Phe	Asp	Leu	Val	Lys	Asn	Gly	Glu	Ser	Ile	Ala	Ser	Phe	Phe	Gln	170	175	180	
Phe	Phe	Gly	Gly	Trp	Pro	Lys	Pro	Ala	Ser	Leu	Ser	Gly	Gly	Ala	185	190	195	
Met	Val	Arg	Leu	Glu	Pro	Glu	Asp	Gln	Val	Trp	Val	Gln	Val	Gly	200	205	210	
Val	Gly	Asp	Tyr	Ile	Gly	Ile	Tyr	Ala	Ser	Ile	Lys	Thr	Asp	Ser	215	220	225	
Thr	Phe	Ser	Gly	Phe	Leu	Val	Tyr	Ser	Asp	Trp	His	Ser	Ser	Pro	230	235	240	

Val Phe Ala

<210> 43
 <211> 24

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 43
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 <210> 44
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 <212> DNA
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 <220>
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 <400> 44
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 <210> 45
 <211> 18
 <212> DNA
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 <220>
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 <400> 45
 gtctgcgatc aggtctgg 18

 <210> 46
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 46
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 <210> 47
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 47
 gacttacact tgccagcaca gcac 24

 <210> 48
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 48

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<210> 49

<211> 1876

<212> DNA

<213> Homo Sapien

<400> 49

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ggacatcctc gccttctatc tgggccgcct ggagaccacc aacgaggtga 1200
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 accgccaagg actccttccg ctgggccaca ggggagcacc aggccttcac 1300
 cagttttgcc tttgggcagc ctgacaacca cgggctggtg tggctgagtg 1350
 ctgccatggg gtttggcaac tgcgtggagc tgcaggcttc agctgccttc 1400
 aactggaacg accagecgtg caaaacccga aaccgttaca tctgccagtt 1450
 tgcccaggag cacatctccc ggtggggccc agggtcctga ggcctgacca 1500
 catggctccc tcgcctgccc tgggagcacc ggctctgctt acctgtctgc 1550
 ccacctgtct ggaacaaggg ccaggttaag accacatgcc tcatgtccaa 1600
 agaggtctca gaccttgcac aatgccagaa gttgggcaga gagaggcagg 1650
 gaggccagtg agggccaggg agtgagtgtt agaagaagct ggggcccttc 1700
 gcttgctttt gattgggaag atgggcttca attagatggc gaaggagagg 1750
 acaccgccag tggtcacaaa aggtctgtct cttccacctg gccagaccc 1800
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 tatgaatcag ctgaaaaaaaa aaaaaa 1876

<210> 50

<211> 455

<212> PRT

<213> Homo Sapien

<400> 50

Met	Leu	His	Pro	Glu	Thr	Ser	Pro	Gly	Arg	Gly	His	Leu	Leu	Ala	1	5	10	15
Val	Leu	Leu	Ala	Leu	Leu	Gly	Thr	Thr	Trp	Ala	Glu	Val	Trp	Pro	20	25	30	
Pro	Gln	Leu	Gln	Glu	Gln	Ala	Pro	Met	Ala	Gly	Ala	Leu	Asn	Arg	35	40	45	
Lys	Glu	Ser	Phe	Leu	Leu	Leu	Ser	Leu	His	Asn	Arg	Leu	Arg	Ser	50	55	60	
Trp	Val	Gln	Pro	Pro	Ala	Ala	Asp	Met	Arg	Arg	Leu	Asp	Trp	Ser	65	70	75	
Asp	Ser	Leu	Ala	Gln	Leu	Ala	Gln	Ala	Arg	Ala	Ala	Leu	Cys	Gly	80	85	90	
Ile	Pro	Thr	Pro	Ser	Leu	Ala	Ser	Gly	Leu	Trp	Arg	Thr	Leu	Gln	95	100	105	
Val	Gly	Trp	Asn	Met	Gln	Leu	Leu	Pro	Ala	Gly	Leu	Ala	Ser	Phe				

110										115					120				
Val	Glu	Val	Val	Ser	Leu	Trp	Phe	Ala		Glu	Gly	Gln	Arg	Tyr	Ser				
				125										130					135
His	Ala	Ala	Gly	Glu	Cys	Ala	Arg	Asn		Ala	Thr	Cys	Thr	His	Tyr				
				140										145					150
Thr	Gln	Leu	Val	Trp	Ala	Thr	Ser	Ser		Gln	Leu	Gly	Cys	Gly	Arg				
				155										160					165
His	Leu	Cys	Ser	Ala	Gly	Gln	Thr	Ala		Ile	Glu	Ala	Phe	Val	Cys				
				170										175					180
Ala	Tyr	Ser	Pro	Gly	Gly	Asn	Trp	Glu		Val	Asn	Gly	Lys	Thr	Ile				
				185										190					195
Ile	Pro	Tyr	Lys	Lys	Gly	Ala	Trp	Cys		Ser	Leu	Cys	Thr	Ala	Ser				
				200										205					210
Val	Ser	Gly	Cys	Phe	Lys	Ala	Trp	Asp		His	Ala	Gly	Gly	Leu	Cys				
				215										220					225
Glu	Val	Pro	Arg	Asn	Pro	Cys	Arg	Met		Ser	Cys	Gln	Asn	His	Gly				
				230										235					240
Arg	Leu	Asn	Ile	Ser	Thr	Cys	His	Cys		His	Cys	Pro	Pro	Gly	Tyr				
				245										250					255
Thr	Gly	Arg	Tyr	Cys	Gln	Val	Arg	Cys		Ser	Leu	Gln	Cys	Val	His				
				260										265					270
Gly	Arg	Phe	Arg	Glu	Glu	Glu	Cys	Ser		Cys	Val	Cys	Asp	Ile	Gly				
				275										280					285
Tyr	Gly	Gly	Ala	Gln	Cys	Ala	Thr	Lys		Val	His	Phe	Pro	Phe	His				
				290										295					300
Thr	Cys	Asp	Leu	Arg	Ile	Asp	Gly	Asp		Cys	Phe	Met	Val	Ser	Ser				
				305										310					315
Glu	Ala	Asp	Thr	Tyr	Tyr	Arg	Ala	Arg		Met	Lys	Cys	Gln	Arg	Lys				
				320										325					330
Gly	Gly	Val	Leu	Ala	Gln	Ile	Lys	Ser		Gln	Lys	Val	Gln	Asp	Ile				
				335										340					345
Leu	Ala	Phe	Tyr	Leu	Gly	Arg	Leu	Glu		Thr	Thr	Asn	Glu	Val	Thr				
				350										355					360
Asp	Ser	Asp	Phe	Glu	Thr	Arg	Asn	Phe		Trp	Ile	Gly	Leu	Thr	Tyr				
				365										370					375
Lys	Thr	Ala	Lys	Asp	Ser	Phe	Arg	Trp		Ala	Thr	Gly	Glu	His	Gln				
				380										385					390
Ala	Phe	Thr	Ser	Phe	Ala	Phe	Gly	Gln		Pro	Asp	Asn	His	Gly	Leu				
				395										400					405

Val Trp Leu Ser Ala Ala Met Gly Phe Gly Asn Cys Val Glu Leu
410 415 420

Gln Ala Ser Ala Ala Phe Asn Trp Asn Asp Gln Arg Cys Lys Thr
425 430 435

Arg Asn Arg Tyr Ile Cys Gln Phe Ala Gln Glu His Ile Ser Arg
440 445 450

Trp Gly Pro Gly Ser
455

<210> 51

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 51

aggaacttct ggatcgggct cacc 24

<210> 52

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 52

gggtctgggc caggtggaag agag 24

<210> 53

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 53

gccaaaggact ccttccgctg ggccacaggg gagcaccagg ccttc 45

<210> 54

<211> 2331

<212> DNA

<213> Homo Sapien

<400> 54

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gtcccgcgcc ctgcgccgc catgctcctg ctgctggggc tgtgcctggg 100

gctgtccctg tgtgtggggc cgcaggaaga ggccgcagagc tggggccact 150

cttcggagca ggatggactc aggggtccga ggcaagtcag actgttgagc 200

aggctgaaaa ccaaaccctt gatgacagaa ttctcagtga agtctaccat 250
 catttcccggt tatgccttca ctacgggtttc ctgcagaatg ctgaacagag 300
 cttctgaaga ccaggacatt gagttccaga tgcagattcc agctgcagct 350
 ttcatcacca acttcactat gcttattgga gacaagggtgt atcagggcga 400
 aattacagag agagaaaaga agagtgggtga tagggtaaaa gagaaaagga 450
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 tctgcagtga ttcccagcaa ggacaaaagcc gcctttttcc tgagttatga 550
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 gtacaacaag ccaggattgc ccagaatgga attttgggag actttatcat 850
 tagatatgac gtcaatagag aacagagcat tggggacatc caggttctaa 900
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ccatgtctgc tggcaccttg atcttgacc tccagcctc cagaactgtg 2250
agaaataaat gtgttttgtt taagctaaaa aaaaaaaaaa aaaaaaaaaa 2300
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 2331

<210> 55

<211> 694

<212> PRT

<213> Homo Sapien

<400> 55

Met	Leu	Leu	Leu	Leu	Gly	Leu	Cys	Leu	Gly	Leu	Ser	Leu	Cys	Val
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Gly	Ser	Gln	Glu	Glu	Ala	Gln	Ser	Trp	Gly	His	Ser	Ser	Glu	Gln
			20						25					30
Asp	Gly	Leu	Arg	Val	Pro	Arg	Gln	Val	Arg	Leu	Leu	Gln	Arg	Leu
			35						40					45
Lys	Thr	Lys	Pro	Leu	Met	Thr	Glu	Phe	Ser	Val	Lys	Ser	Thr	Ile
			50						55					60
Ile	Ser	Arg	Tyr	Ala	Phe	Thr	Thr	Val	Ser	Cys	Arg	Met	Leu	Asn
			65						70					75
Arg	Ala	Ser	Glu	Asp	Gln	Asp	Ile	Glu	Phe	Gln	Met	Gln	Ile	Pro
			80						85					90
Ala	Ala	Ala	Phe	Ile	Thr	Asn	Phe	Thr	Met	Leu	Ile	Gly	Asp	Lys
			95						100					105
Val	Tyr	Gln	Gly	Glu	Ile	Thr	Glu	Arg	Glu	Lys	Lys	Ser	Gly	Asp
			110						115					120

Arg Val Lys Glu Lys Arg Asn Lys Thr Thr Glu Glu Asn Gly Glu	125	130	135
Lys Gly Thr Glu Ile Phe Arg Ala Ser Ala Val Ile Pro Ser Lys	140	145	150
Asp Lys Ala Ala Phe Phe Leu Ser Tyr Glu Glu Leu Leu Gln Arg	155	160	165
Arg Leu Gly Lys Tyr Glu His Ser Ile Ser Val Arg Pro Gln Gln	170	175	180
Leu Ser Gly Arg Leu Ser Val Asp Val Asn Ile Leu Glu Ser Ala	185	190	195
Gly Ile Ala Ser Leu Glu Val Leu Pro Leu His Asn Ser Arg Gln	200	205	210
Arg Gly Ser Gly Arg Gly Glu Asp Asp Ser Gly Pro Pro Pro Ser	215	220	225
Thr Val Ile Asn Gln Asn Glu Thr Phe Ala Asn Ile Ile Phe Lys	230	235	240
Pro Thr Val Val Gln Gln Ala Arg Ile Ala Gln Asn Gly Ile Leu	245	250	255
Gly Asp Phe Ile Ile Arg Tyr Asp Val Asn Arg Glu Gln Ser Ile	260	265	270
Gly Asp Ile Gln Val Leu Asn Gly Tyr Phe Val His Tyr Phe Ala	275	280	285
Pro Lys Asp Leu Pro Pro Leu Pro Lys Asn Val Val Phe Val Leu	290	295	300
Asp Ser Ser Ala Ser Met Val Gly Thr Lys Leu Arg Gln Thr Lys	305	310	315
Asp Ala Leu Phe Thr Ile Leu His Asp Leu Arg Pro Gln Asp Arg	320	325	330
Phe Ser Ile Ile Gly Phe Ser Asn Arg Ile Lys Val Trp Lys Asp	335	340	345
His Leu Ile Ser Val Thr Pro Asp Ser Ile Arg Asp Gly Lys Val	350	355	360
Tyr Ile His His Met Ser Pro Thr Gly Gly Thr Asp Ile Asn Gly	365	370	375
Ala Leu Gln Arg Ala Ile Arg Leu Leu Asn Lys Tyr Val Ala His	380	385	390
Ser Gly Ile Gly Asp Arg Ser Val Ser Leu Ile Val Phe Leu Thr	395	400	405
Asp Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu Lys Ile Leu			

410					415					420				
Asn	Asn	Thr	Arg	Glu	Ala	Ala	Arg	Gly	Gln	Val	Cys	Ile	Phe	Thr
				425					430					435
Ile	Gly	Ile	Gly	Asn	Asp	Val	Asp	Phe	Arg	Leu	Leu	Glu	Lys	Leu
				440					445					450
Ser	Leu	Glu	Asn	Cys	Gly	Leu	Thr	Arg	Arg	Val	His	Glu	Glu	Glu
				455					460					465
Asp	Ala	Gly	Ser	Gln	Leu	Ile	Gly	Phe	Tyr	Asp	Glu	Ile	Arg	Thr
				470					475					480
Pro	Leu	Leu	Ser	Asp	Ile	Arg	Ile	Asp	Tyr	Pro	Pro	Ser	Ser	Val
				485					490					495
Val	Gln	Ala	Thr	Lys	Thr	Leu	Phe	Pro	Asn	Tyr	Phe	Asn	Gly	Ser
				500					505					510
Glu	Ile	Ile	Ile	Ala	Gly	Lys	Leu	Val	Asp	Arg	Lys	Leu	Asp	His
				515					520					525
Leu	His	Val	Glu	Val	Thr	Ala	Ser	Asn	Ser	Lys	Lys	Phe	Ile	Ile
				530					535					540
Leu	Lys	Thr	Asp	Val	Pro	Val	Arg	Pro	Gln	Lys	Ala	Gly	Lys	Asp
				545					550					555
Val	Thr	Gly	Ser	Pro	Arg	Pro	Gly	Gly	Asp	Gly	Glu	Gly	Asp	Thr
				560					565					570
Asn	His	Ile	Glu	Arg	Leu	Trp	Ser	Tyr	Leu	Thr	Thr	Lys	Glu	Leu
				575					580					585
Leu	Ser	Ser	Trp	Leu	Gln	Ser	Asp	Asp	Glu	Pro	Glu	Lys	Glu	Arg
				590					595					600
Leu	Arg	Gln	Arg	Ala	Gln	Ala	Leu	Ala	Val	Ser	Tyr	Arg	Phe	Leu
				605					610					615
Thr	Pro	Phe	Thr	Ser	Met	Lys	Leu	Arg	Gly	Pro	Val	Pro	Arg	Met
				620					625					630
Asp	Gly	Leu	Glu	Glu	Ala	His	Gly	Met	Ser	Ala	Ala	Met	Gly	Pro
				635					640					645
Glu	Pro	Val	Val	Gln	Ser	Val	Arg	Gly	Ala	Gly	Thr	Gln	Pro	Gly
				650					655					660
Pro	Leu	Leu	Lys	Lys	Pro	Asn	Ser	Val	Lys	Lys	Lys	Gln	Asn	Lys
				665					670					675
Thr	Lys	Lys	Arg	His	Gly	Arg	Asp	Gly	Val	Phe	Pro	Leu	His	His
				680					685					690
Leu	Gly	Ile	Arg											

<210> 56
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 56
 gtgggaacca aactccggca gacc 24

 <210> 57
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 57
 cacatcgagc gtctctgg 18

 <210> 58
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 58
 agccgctcct tctccggttc atcg 24

 <210> 59
 <211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 59
 tggaaggacc acttgatata agtcactcca gacagcatca gggatggg 48

 <210> 60
 <211> 1413
 <212> DNA
 <213> Homo Sapien

 <400> 60
 cggacgcgtg gggtgcccgga catggcgagt gtagtgctgc cgagcggatc 50
 ccagtgtgcg gcggcagcgg cggcggcggc gcctcccggg ctccggcttc 100
 tgctgttgct cttctccgcc gcggcactga tccccacagg tgatgggcag 150
 aatctgttta cgaaagacgt gacagtgatc gagggagagg ttgcgaccat 200

cagttgccaa gtcaataaga gtgacgactc tgtgattcag ctactgaatc 250
 ccaacaggca gaccatttat ttcagggact tcaggccttt gaaggacagc 300
 aggtttcagt tgctgaattt ttctagcagt gaactcaaag tatcattgac 350
 aaacgtctca atttctgatg aaggaagata cttttgccag ctctataaccg 400
 atccccca gaaagttac accaccatca cagtcctggt cccaccacgt 450
 aatctgatga tcgatatcca gaaagacact gcggtggaag gtgaggagat 500
 tgaagtcaac tgcactgcta tggccagcaa gccagccacg actatcaggt 550
 ggttcaaagg gaacacagag ctaaaaggca aatcggaggt ggaagagtgg 600
 tcagacatgt aactgtgac cagtcagctg atgctgaagg tgcacaagga 650
 ggacgatggg gtcccagtga tctgccaggt ggagcaccct gcggtcactg 700
 gaaacctgca gaccagcgg tatctagaag tacagtataa gcctcaagtg 750
 cacattcaga tgacttatcc tctacaaggc ttaacccggg aaggggacgc 800
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 cccaacctgt tcatcaataa cctaacaaca acagataatg gtacataaccg 950
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 gggcgctatt ttgccagaca taaaggtaca tacttcactc atgaagccaa 1250
 aggagccgat gacgcagcag acgcagacac agctataatc aatgcagaag 1300
 gaggacagaa caactccgaa gaaaagaaag agtacttcat ctagatcagc 1350
 ctttttgttt caatgaggtg tccaactggc cctattttaga tgataaagag 1400
 acagtgatat tgg 1413

<210> 61

<211> 440

<212> PRT

<213> Homo Sapien

<400> 61

Met	Ala	Ser	Val	Val	Leu	Pro	Ser	Gly	Ser	Gln	Cys	Ala	Ala	Ala
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Ala	Ala	Ala	Ala	Ala	Pro	Pro	Gly	Leu	Arg	Leu	Leu	Leu	Leu	Leu		20	25	30
Phe	Ser	Ala	Ala	Ala	Leu	Ile	Pro	Thr	Gly	Asp	Gly	Gln	Asn	Leu		35	40	45
Phe	Thr	Lys	Asp	Val	Thr	Val	Ile	Glu	Gly	Glu	Val	Ala	Thr	Ile		50	55	60
Ser	Cys	Gln	Val	Asn	Lys	Ser	Asp	Asp	Ser	Val	Ile	Gln	Leu	Leu		65	70	75
Asn	Pro	Asn	Arg	Gln	Thr	Ile	Tyr	Phe	Arg	Asp	Phe	Arg	Pro	Leu		80	85	90
Lys	Asp	Ser	Arg	Phe	Gln	Leu	Leu	Asn	Phe	Ser	Ser	Ser	Glu	Leu		95	100	105
Lys	Val	Ser	Leu	Thr	Asn	Val	Ser	Ile	Ser	Asp	Glu	Gly	Arg	Tyr		110	115	120
Phe	Cys	Gln	Leu	Tyr	Thr	Asp	Pro	Pro	Gln	Glu	Ser	Tyr	Thr	Thr		125	130	135
Ile	Thr	Val	Leu	Val	Pro	Pro	Arg	Asn	Leu	Met	Ile	Asp	Ile	Gln		140	145	150
Lys	Asp	Thr	Ala	Val	Glu	Gly	Glu	Glu	Ile	Glu	Val	Asn	Cys	Thr		155	160	165
Ala	Met	Ala	Ser	Lys	Pro	Ala	Thr	Thr	Ile	Arg	Trp	Phe	Lys	Gly		170	175	180
Asn	Thr	Glu	Leu	Lys	Gly	Lys	Ser	Glu	Val	Glu	Glu	Trp	Ser	Asp		185	190	195
Met	Tyr	Thr	Val	Thr	Ser	Gln	Leu	Met	Leu	Lys	Val	His	Lys	Glu		200	205	210
Asp	Asp	Gly	Val	Pro	Val	Ile	Cys	Gln	Val	Glu	His	Pro	Ala	Val		215	220	225
Thr	Gly	Asn	Leu	Gln	Thr	Gln	Arg	Tyr	Leu	Glu	Val	Gln	Tyr	Lys		230	235	240
Pro	Gln	Val	His	Ile	Gln	Met	Thr	Tyr	Pro	Leu	Gln	Gly	Leu	Thr		245	250	255
Arg	Glu	Gly	Asp	Ala	Leu	Glu	Leu	Thr	Cys	Glu	Ala	Ile	Gly	Lys		260	265	270
Pro	Gln	Pro	Val	Met	Val	Thr	Trp	Val	Arg	Val	Asp	Asp	Glu	Met		275	280	285
Pro	Gln	His	Ala	Val	Leu	Ser	Gly	Pro	Asn	Leu	Phe	Ile	Asn	Asn		290	295	300
Leu	Asn	Lys	Thr	Asp	Asn	Gly	Thr	Tyr	Arg	Cys	Glu	Ala	Ser	Asn				

305	310	315
Ile Val Gly Lys Ala His Ser Asp Tyr	Met Leu Tyr Val Tyr Asp	
320	325	330
Pro Pro Thr Thr Ile Pro Pro Pro Thr	Thr Thr Thr Thr Thr Thr	
335	340	345
Thr Thr Thr Thr Thr Thr Ile Leu Thr	Ile Ile Thr Asp Ser Arg	
350	355	360
Ala Gly Glu Glu Gly Ser Ile Arg Ala	Val Asp His Ala Val Ile	
365	370	375
Gly Gly Val Val Ala Val Val Val Phe	Ala Met Leu Cys Leu Leu	
380	385	390
Ile Ile Leu Gly Arg Tyr Phe Ala Arg	His Lys Gly Thr Tyr Phe	
395	400	405
Thr His Glu Ala Lys Gly Ala Asp Asp	Ala Ala Asp Ala Asp Thr	
410	415	420
Ala Ile Ile Asn Ala Glu Gly Gly Gln	Asn Asn Ser Glu Glu Lys	
425	430	435
Lys Glu Tyr Phe Ile		
440		

<210> 62

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 62

ggcttctgct gttgctcttc tccg 24

<210> 63

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 63

gtacactgtg accagtcagc 20

<210> 64

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 64
atcatcacag attcccgagc 20

<210> 65
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 65
ttcaatctcc tcaccttcca ccgc 24

<210> 66
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 66
atagctgtgt ctgcgtctgc tgcg 24

<210> 67
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 67
cgcggcactg atccccacag gtgatgggca gaatctgttt acgaaagacg 50

<210> 68
<211> 2555
<212> DNA
<213> Homo Sapien

<400> 68
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 aaaaa 2555

<210> 69

<211> 598

<212> PRT

<213> Homo Sapien

<400> 69

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Ala	Leu	Gly	Pro	Gly	Val	Gln	Gly	Cys	Pro	Ser	Gly	Cys	Gln	Cys	20	25	30	
Ser	Gln	Pro	Gln	Thr	Val	Phe	Cys	Thr	Ala	Arg	Gln	Gly	Thr	Thr	35	40	45	
Val	Pro	Arg	Asp	Val	Pro	Pro	Asp	Thr	Val	Gly	Leu	Tyr	Val	Phe	50	55	60	
Glu	Asn	Gly	Ile	Thr	Met	Leu	Asp	Ala	Ser	Ser	Phe	Ala	Gly	Leu	65	70	75	
Pro	Gly	Leu	Gln	Leu	Leu	Asp	Leu	Ser	Gln	Asn	Gln	Ile	Ala	Ser	80	85	90	
Leu	Arg	Leu	Pro	Arg	Leu	Leu	Leu	Leu	Asp	Leu	Ser	His	Asn	Ser	95	100	105	
Leu	Leu	Ala	Leu	Glu	Pro	Gly	Ile	Leu	Asp	Thr	Ala	Asn	Val	Glu				

110	115	120
Ala Leu Arg Leu	Ala Gly Leu Gly Leu Gln Gln Leu Asp Glu Gly	
125	130	135
Leu Phe Ser Arg	Leu Arg Asn Leu His Asp Leu Asp Val Ser Asp	
140	145	150
Asn Gln Leu Glu	Arg Val Pro Pro Val Ile Arg Gly Leu Arg Gly	
155	160	165
Leu Thr Arg Leu	Arg Leu Ala Gly Asn Thr Arg Ile Ala Gln Leu	
170	175	180
Arg Pro Glu Asp	Leu Ala Gly Leu Ala Ala Leu Gln Glu Leu Asp	
185	190	195
Val Ser Asn Leu	Ser Leu Gln Ala Leu Pro Gly Asp Leu Ser Gly	
200	205	210
Leu Phe Pro Arg	Leu Arg Leu Leu Ala Ala Ala Arg Asn Pro Phe	
215	220	225
Asn Cys Val Cys	Pro Leu Ser Trp Phe Gly Pro Trp Val Arg Glu	
230	235	240
Ser His Val Thr	Leu Ala Ser Pro Glu Glu Thr Arg Cys His Phe	
245	250	255
Pro Pro Lys Asn	Ala Gly Arg Leu Leu Leu Glu Leu Asp Tyr Ala	
260	265	270
Asp Phe Gly Cys	Pro Ala Thr Thr Thr Thr Ala Thr Val Pro Thr	
275	280	285
Thr Arg Pro Val	Val Arg Glu Pro Thr Ala Leu Ser Ser Ser Leu	
290	295	300
Ala Pro Thr Trp	Leu Ser Pro Thr Ala Pro Ala Thr Glu Ala Pro	
305	310	315
Ser Pro Pro Ser	Thr Ala Pro Pro Thr Val Gly Pro Val Pro Gln	
320	325	330
Pro Gln Asp Cys	Pro Pro Ser Thr Cys Leu Asn Gly Gly Thr Cys	
335	340	345
His Leu Gly Thr	Arg His His Leu Ala Cys Leu Cys Pro Glu Gly	
350	355	360
Phe Thr Gly Leu	Tyr Cys Glu Ser Gln Met Gly Gln Gly Thr Arg	
365	370	375
Pro Ser Pro Thr	Pro Val Thr Pro Arg Pro Pro Arg Ser Leu Thr	
380	385	390
Leu Gly Ile Glu	Pro Val Ser Pro Thr Ser Leu Arg Val Gly Leu	
395	400	405

Gln Arg Tyr Leu	Gln Gly Ser Ser Val	Gln Leu Arg Ser Leu Arg
410	415	420
Leu Thr Tyr Arg	Asn Leu Ser Gly Pro Asp Lys Arg Leu Val Thr	
425	430	435
Leu Arg Leu Pro	Ala Ser Leu Ala Glu Tyr Thr Val Thr Gln Leu	
440	445	450
Arg Pro Asn Ala	Thr Tyr Ser Val Cys Val Met Pro Leu Gly Pro	
455	460	465
Gly Arg Val Pro	Glu Gly Glu Glu Ala Cys Gly Glu Ala His Thr	
470	475	480
Pro Pro Ala Val	His Ser Asn His Ala Pro Val Thr Gln Ala Arg	
485	490	495
Glu Gly Asn Leu	Pro Leu Leu Ile Ala Pro Ala Leu Ala Ala Val	
500	505	510
Leu Leu Ala Ala	Leu Ala Ala Val Gly Ala Ala Tyr Cys Val Arg	
515	520	525
Arg Gly Arg Ala	Met Ala Ala Ala Ala Gln Asp Lys Gly Gln Val	
530	535	540
Gly Pro Gly Ala	Gly Pro Leu Glu Leu Glu Gly Val Lys Val Pro	
545	550	555
Leu Glu Pro Gly	Pro Lys Ala Thr Glu Gly Gly Gly Glu Ala Leu	
560	565	570
Pro Ser Gly Ser	Glu Cys Glu Val Pro Leu Met Gly Phe Pro Gly	
575	580	585
Pro Gly Leu Gln	Ser Pro Leu His Ala Lys Pro Tyr Ile	
590	595	

<210> 70

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 70

ccctccactg ccccaccgac tg 22

<210> 71

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 71
 cggttctggg gacgttaggg ctcg 24

<210> 72
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 72
 ctgccaccg tccacctgcc tcaat 25

<210> 73
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 73
 aggactgccc accgtccacc tgcctcaatg ggggcacatg ccacc 45

<210> 74
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Oligonucleotide Probe

<400> 74
 acgcaaagcc ctacatctaa gccagagaga gacagggcag ctggg 45

<210> 75
 <211> 1077
 <212> DNA
 <213> Homo Sapien

<400> 75
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 cgccccgcca cctccttgct accccactct tgaaaccaca gctgttgga 100
 ggggtccccag ctcatgccag cctcatctcc tttcttgcta gccccaaaag 150
 ggcctccagg caacatgggg ggcccagtca gagagccggc actctcagtt 200
 gccctctggt tgagttgggg ggcagctctg ggggccgtgg cttgtgccat 250
 ggctctgctg acccaacaaa cagagctgca gagcctcagg agagaggtga 300
 gccggctgca ggggacagga ggccccctccc agaatgggga agggatatccc 350
 tggcagagtc tcccggagca gagttccgat gccctggaag cctgggagaa 400

tggggagaga tccccgaaaa ggagagcagt gctcacccaa aaacagaaga 450
 agcagcactc tgtcctgcac ctggttccca ttaacgccac ctccaaggat 500
 gactccgatg tgacagaggt gatgtggcaa ccagctctta ggcgtgggag 550
 aggcctacag gccaaggat atggtgtccg aatccaggat gctggagttt 600
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 ccagggtggg tacatactgg agacagccaa gagctgagta tataaaggag 950
 agggaatgtg caggaacaga ggcattcttc tgggtttggc tccccgttcc 1000
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 cttgcttctg ttccccatgg agctccg 1077

<210> 76

<211> 250

<212> PRT

<213> Homo Sapien

<400> 76

Met	Pro	Ala	Ser	Ser	Pro	Phe	Leu	Leu	Ala	Pro	Lys	Gly	Pro	Pro
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Gly	Asn	Met	Gly	Gly	Pro	Val	Arg	Glu	Pro	Ala	Leu	Ser	Val	Ala
			20						25					30
Leu	Trp	Leu	Ser	Trp	Gly	Ala	Ala	Leu	Gly	Ala	Val	Ala	Cys	Ala
			35						40					45
Met	Ala	Leu	Leu	Thr	Gln	Gln	Thr	Glu	Leu	Gln	Ser	Leu	Arg	Arg
			50						55					60
Glu	Val	Ser	Arg	Leu	Gln	Gly	Thr	Gly	Gly	Pro	Ser	Gln	Asn	Gly
			65						70					75
Glu	Gly	Tyr	Pro	Trp	Gln	Ser	Leu	Pro	Glu	Gln	Ser	Ser	Asp	Ala
			80						85					90
Leu	Glu	Ala	Trp	Glu	Asn	Gly	Glu	Arg	Ser	Arg	Lys	Arg	Arg	Ala
			95						100					105
Val	Leu	Thr	Gln	Lys	Gln	Lys	Lys	Gln	His	Ser	Val	Leu	His	Leu
			110						115					120

Val	Pro	Ile	Asn	Ala	Thr	Ser	Lys	Asp	Asp	Ser	Asp	Val	Thr	Glu	125	130	135
Val	Met	Trp	Gln	Pro	Ala	Leu	Arg	Arg	Gly	Arg	Gly	Leu	Gln	Ala	140	145	150
Gln	Gly	Tyr	Gly	Val	Arg	Ile	Gln	Asp	Ala	Gly	Val	Tyr	Leu	Leu	155	160	165
Tyr	Ser	Gln	Val	Leu	Phe	Gln	Asp	Val	Thr	Phe	Thr	Met	Gly	Gln	170	175	180
Val	Val	Ser	Arg	Glu	Gly	Gln	Gly	Arg	Gln	Glu	Thr	Leu	Phe	Arg	185	190	195
Cys	Ile	Arg	Ser	Met	Pro	Ser	His	Pro	Asp	Arg	Ala	Tyr	Asn	Ser	200	205	210
Cys	Tyr	Ser	Ala	Gly	Val	Phe	His	Leu	His	Gln	Gly	Asp	Ile	Leu	215	220	225
Ser	Val	Ile	Ile	Pro	Arg	Ala	Arg	Ala	Lys	Leu	Asn	Leu	Ser	Pro	230	235	240
His	Gly	Thr	Phe	Leu	Gly	Phe	Val	Lys	Leu						245	250	

<210> 77
 <211> 2849
 <212> DNA
 <213> Homo Sapien

<400> 77
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 tgccgtcttc cggaagacct tttcccttgc tetgttttct tcaccgagtc 200
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<210> 78

<211> 281

<212> PRT

<213> Homo Sapien

<400> 78

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Leu	Ala	Phe	Ala	Ser	Gly	Leu	Val	Leu	Ser	Arg	Val	Pro	His	Val
				20					25					30
Gln	Gly	Glu	Gln	Gln	Glu	Trp	Glu	Gly	Thr	Glu	Glu	Leu	Pro	Ser
				35					40					45
Pro	Pro	Asp	His	Ala	Glu	Arg	Ala	Glu	Glu	Gln	His	Glu	Lys	Tyr
				50					55					60
Arg	Pro	Ser	Gln	Asp	Gln	Gly	Leu	Pro	Ala	Ser	Arg	Cys	Leu	Arg
				65					70					75
Cys	Cys	Asp	Pro	Gly	Thr	Ser	Met	Tyr	Pro	Ala	Thr	Ala	Val	Pro
				80					85					90
Gln	Ile	Asn	Ile	Thr	Ile	Leu	Lys	Gly	Glu	Lys	Gly	Asp	Arg	Gly
				95					100					105
Asp	Arg	Gly	Leu	Gln	Gly	Lys	Tyr	Gly	Lys	Thr	Gly	Ser	Ala	Gly

110	115	120
Ala Arg Gly His Thr Gly Pro Lys Gly	Gln Lys Gly Ser Met Gly	
125	130	135
Ala Pro Gly Glu Arg Cys Lys Ser His	Tyr Ala Ala Phe Ser Val	
140	145	150
Gly Arg Lys Lys Pro Met His Ser Asn	His Tyr Tyr Gln Thr Val	
155	160	165
Ile Phe Asp Thr Glu Phe Val Asn Leu	Tyr Asp His Phe Asn Met	
170	175	180
Phe Thr Gly Lys Phe Tyr Cys Tyr Val	Pro Gly Leu Tyr Phe Phe	
185	190	195
Ser Leu Asn Val His Thr Trp Asn Gln	Lys Glu Thr Tyr Leu His	
200	205	210
Ile Met Lys Asn Glu Glu Glu Val Val	Ile Leu Phe Ala Gln Val	
215	220	225
Gly Asp Arg Ser Ile Met Gln Ser Gln	Ser Leu Met Leu Glu Leu	
230	235	240
Arg Glu Gln Asp Gln Val Trp Val Arg	Leu Tyr Lys Gly Glu Arg	
245	250	255
Glu Asn Ala Ile Phe Ser Glu Glu Leu	Asp Thr Tyr Ile Thr Phe	
260	265	270
Ser Gly Tyr Leu Val Lys His Ala Thr	Glu Pro	
275	280	

<210> 79

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 79

tacaggccca gtcaggacca gggg 24

<210> 80

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 80

ctgaagaagt agaggccggg cacg 24

<210> 81

<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 81
cccgggtgctt gcgctgctgt gaccccggtg cctccatgta cccgg 45

<210> 82
<211> 2284
<212> DNA
<213> Homo Sapien

<400> 82
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ggcgccggggg tcctctcgac gccagagaga aatctcatca tctgtgcagc 150
cttcttaaag caaactaaga ccagagggag gattatcctt gacctttgaa 200
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tacactccaa gcaatggcta caacagcagt tctgactacc acctttcagg 1150
cacctacgga ctcgaaaggc agcttagaaa ccataccgtt tacagaaatc 1200
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tatgtcaaat gtggagtctt ccactatgaa taaaactgct tcctgggaag 1300
gtagggaggc cagtccaggc agttcctccc agggcagtggt tccagaaaat 1350
cagtacggcc ttccatttga aaaatggctt cttatcgggt cctgctctt 1400
tggtgtcctg ttctgggtga taggcctcgt cctcctgggt agaatecttt 1450
cggaatcact ccgcaggaaa cgttactcaa gactggatta tttgatcaat 1500
gggatctatg tggacatcta aggatggaac tcggtgtctc ttaattcatt 1550
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acacctgggt gatttttga ttttagtag agacgggggt tcaccatgtt 1850
ggtcaggctg gtctcaaact cctgacctag tgatccaccc tcctcggcct 1900
cccaaagtgc tgggattaca ggcatgagcc accacagctg gcccccttct 1950
gttttatgtt tggtttttga gaaggaatga agtgggaacc aaattaggta 2000
attttgggtg atctgtctct aaaatattag ctaaaaacaa agctctatgt 2050
aaagtaataa agtataattg ccatataaat ttcaaaattc aactggcctt 2100
tatgcaaaga aacagggttag gacatctagg ttccaattca ttcacattct 2150
tggttccaga taaaatcaac tgtttatata aatttctaata ggatttgctt 2200
ttctttttat atggattcct ttaaaactta ttccagatgt agttccttcc 2250
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<210> 83

<211> 431

<212> PRT

<213> Homo Sapien

<400> 83

Met	Phe	Phe	Gly	Gly	Glu	Gly	Ser	Leu	Thr	Tyr	Thr	Leu	Val	Ile
1				5					10					15

Ile	Cys	Phe	Leu	Thr	Leu	Arg	Leu	Ser	Ala	Ser	Gln	Asn	Cys	Leu	20	25	30
Lys	Lys	Ser	Leu	Glu	Asp	Val	Val	Ile	Asp	Ile	Gln	Ser	Ser	Leu	35	40	45
Ser	Lys	Gly	Ile	Arg	Gly	Asn	Glu	Pro	Val	Tyr	Thr	Ser	Thr	Gln	50	55	60
Glu	Asp	Cys	Ile	Asn	Ser	Cys	Cys	Ser	Thr	Lys	Asn	Ile	Ser	Gly	65	70	75
Asp	Lys	Ala	Cys	Asn	Leu	Met	Ile	Phe	Asp	Thr	Arg	Lys	Thr	Ala	80	85	90
Arg	Gln	Pro	Asn	Cys	Tyr	Leu	Phe	Phe	Cys	Pro	Asn	Glu	Glu	Ala	95	100	105
Cys	Pro	Leu	Lys	Pro	Ala	Lys	Gly	Leu	Met	Ser	Tyr	Arg	Ile	Ile	110	115	120
Thr	Asp	Phe	Pro	Ser	Leu	Thr	Arg	Asn	Leu	Pro	Ser	Gln	Glu	Leu	125	130	135
Pro	Gln	Glu	Asp	Ser	Leu	Leu	His	Gly	Gln	Phe	Ser	Gln	Ala	Val	140	145	150
Thr	Pro	Leu	Ala	His	His	His	Thr	Asp	Tyr	Ser	Lys	Pro	Thr	Asp	155	160	165
Ile	Ser	Trp	Arg	Asp	Thr	Leu	Ser	Gln	Lys	Phe	Gly	Ser	Ser	Asp	170	175	180
His	Leu	Glu	Lys	Leu	Phe	Lys	Met	Asp	Glu	Ala	Ser	Ala	Gln	Leu	185	190	195
Leu	Ala	Tyr	Lys	Glu	Lys	Gly	His	Ser	Gln	Ser	Ser	Gln	Phe	Ser	200	205	210
Ser	Asp	Gln	Glu	Ile	Ala	His	Leu	Leu	Pro	Glu	Asn	Val	Ser	Ala	215	220	225
Leu	Pro	Ala	Thr	Val	Ala	Val	Ala	Ser	Pro	His	Thr	Thr	Ser	Ala	230	235	240
Thr	Pro	Lys	Pro	Ala	Thr	Leu	Leu	Pro	Thr	Asn	Ala	Ser	Val	Thr	245	250	255
Pro	Ser	Gly	Thr	Ser	Gln	Pro	Gln	Leu	Ala	Thr	Thr	Ala	Pro	Pro	260	265	270
Val	Thr	Thr	Val	Thr	Ser	Gln	Pro	Pro	Thr	Thr	Leu	Ile	Ser	Thr	275	280	285
Val	Phe	Thr	Arg	Ala	Ala	Ala	Thr	Leu	Gln	Ala	Met	Ala	Thr	Thr	290	295	300
Ala	Val	Leu	Thr	Thr	Thr	Phe	Gln	Ala	Pro	Thr	Asp	Ser	Lys	Gly			

305	310	315
Ser Leu Glu Thr Ile Pro Phe Thr Glu 320	Ile Ser Asn Leu Thr Leu 325	Leu 330
Asn Thr Gly Asn Val Tyr Asn Pro Thr 335	Ala Leu Ser Met Ser 340	Asn 345
Val Glu Ser Ser Thr Met Asn Lys Thr 350	Ala Ser Trp Glu Gly 355	Arg 360
Glu Ala Ser Pro Gly Ser Ser Ser Gln 365	Gly Ser Val Pro Glu 370	Asn 375
Gln Tyr Gly Leu Pro Phe Glu Lys Trp 380	Leu Leu Ile Gly Ser 385	Leu 390
Leu Phe Gly Val Leu Phe Leu Val Ile 395	Gly Leu Val Leu Leu 400	Gly 405
Arg Ile Leu Ser Glu Ser Leu Arg Arg 410	Lys Arg Tyr Ser Arg 415	Leu 420
Asp Tyr Leu Ile Asn Gly Ile Tyr Val 425	Asp Ile 430	

<210> 84

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 84

agggaggatt atccttgacc tttgaagacc 30

<210> 85

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 85

gaagcaagtg cccagctc 18

<210> 86

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 86

cgggtccctg ctcttttg 18

<210> 87
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 87
caccgtagct gggagcgac tcac 24

<210> 88
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 88
agtgtagtc aagctccc 18

<210> 89
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 89
gcttcctgac actaaggctg tctgctagtc agaattgcct caaaaagag 49

<210> 90
<211> 957
<212> DNA
<213> Homo Sapien

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gtcttcgcct ccttgtgtgc ctggtattcg ggtacctgc tcgcagagct 100
cattccagat gcaccctgt ccagtgtgc ctatagcatc cgcagcatcg 150
gggagaggcc tgcctcaaa gctccagtcc ccaaaaggca aaaatgtgac 200
cactggactc cctgcccatac tgacacctat gcctacaggt tactcagcgg 250
agggtggcaga agcaagtaacg ccaaaatctg ctttgaggat aacctactta 300
tgggagaaca gctgggaaat gttgccagag gaataaacat tgccattgtc 350
aactatgtaa ctgggaatgt gacagcaaca cgatgttttg atatgtatga 400
aggcgataac tctggaccga tgacaaagtt tattcagagt gctgctccaa 450
aatccctgct cttcatgggtg acctatgacg acggaagcac aagactgaat 500

aacgatgcc aagaatgccat agaagcactt ggaagtaaag aaatcaggaa 550
 catgaaattc aggtctagct gggatatttat tgcagcaaaa ggcttggaac 600
 tcccttccga aattcagaga gaaaagatca accactctga tgctaagaac 650
 aacagatatt ctggctggcc tgcagagatc cagatagaag gctgcatacc 700
 caaagaacga agctgacact gcagggtcct gagtaaagt gttctgtata 750
 aacaaatgca gctggaatcg ctcaagaatc ttatttttct aaatccaaca 800
 gcccatattt gatgagtatt ttgggtttgt tgtaaaccac tgaacatttg 850
 ctagttgtat caaatcttgg tacgcagtat ttttatacca gtattttatg 900
 tagtgaagat gtcaattagc aggaaactaa aatgaatgga aattcttaaa 950
 aaaaaaa 957

<210> 91
 <211> 235
 <212> PRT
 <213> Homo Sapien

<400> 91
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 1 5 10 15
 Phe Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu
 20 25 30
 Leu Ile Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg
 35 40 45
 Ser Ile Gly Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg
 50 55 60
 Gln Lys Cys Asp His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala
 65 70 75
 Tyr Arg Leu Leu Ser Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile
 80 85 90
 Cys Phe Glu Asp Asn Leu Leu Met Gly Glu Gln Leu Gly Asn Val
 95 100 105
 Ala Arg Gly Ile Asn Ile Ala Ile Val Asn Tyr Val Thr Gly Asn
 110 115 120
 Val Thr Ala Thr Arg Cys Phe Asp Met Tyr Glu Gly Asp Asn Ser
 125 130 135
 Gly Pro Met Thr Lys Phe Ile Gln Ser Ala Ala Pro Lys Ser Leu
 140 145 150
 Leu Phe Met Val Thr Tyr Asp Asp Gly Ser Thr Arg Leu Asn Asn
 155 160 165

Asp	Ala	Lys	Asn	Ala	Ile	Glu	Ala	Leu	Gly	Ser	Lys	Glu	Ile	Arg
			170						175					180
Asn	Met	Lys	Phe	Arg	Ser	Ser	Trp	Val	Phe	Ile	Ala	Ala	Lys	Gly
			185						190					195
Leu	Glu	Leu	Pro	Ser	Glu	Ile	Gln	Arg	Glu	Lys	Ile	Asn	His	Ser
			200						205					210
Asp	Ala	Lys	Asn	Asn	Arg	Tyr	Ser	Gly	Trp	Pro	Ala	Glu	Ile	Gln
			215						220					225
Ile	Glu	Gly	Cys	Ile	Pro	Lys	Glu	Arg	Ser					
			230						235					

<210> 92

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 92

aatgtgacca ctggactccc 20

<210> 93

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 93

aggcttgga ctccttc 18

<210> 94

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 94

aagattcttg agcgattcca gctg 24

<210> 95

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 95

aatccctgct cttcatggtg acctatgacg acggaagcac aagactg 47

<210> 96
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 96
 ctcaagaagc acgcgtactg c 21

 <210> 97
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 97
 ccaacctcag cttccgcctc tacga 25

 <210> 98
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 98
 catccaggct cgccactg 18

 <210> 99
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 99
 tggcaaggaa tgggaacagt 20

 <210> 100
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 100
 atgctgccag acctgatcgc agaca 25

 <210> 101
 <211> 19
 <212> DNA

<213> Artificial Sequence
 <220>
 <223> Synthetic oligonucleotide probe
 <400> 101
 gggcagaaat ccagccact 19
 <210> 102
 <211> 18
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic oligonucleotide probe
 <400> 102
 cccttcgcct gcttttga 18
 <210> 103
 <211> 27
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic oligonucleotide probe
 <400> 103
 gccatctaata tgaagcccat cttccca 27
 <210> 104
 <211> 19
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic oligonucleotide probe
 <400> 104
 ctggcggtgt cctctcctt 19
 <210> 105
 <211> 21
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic oligonucleotide probe
 <400> 105
 cctcggtctc ctcactgtg a 21
 <210> 106
 <211> 20
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 <213> Artificial Sequence
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<223> Synthetic oligonucleotide probe

<400> 106
tggcccagct gacgagccct 20

<210> 107
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 107
ctcataggca ctcggttctg g 21

<210> 108
<211> 19
<212> DNA
<213> Artificial Sequence

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<400> 108
tggctcccag cttggaaga 19

<210> 109
<211> 30
<212> DNA
<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 109
cagctcttgg ctgtctccag tatgtaccca 30

<210> 110
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 110
gatgcctctg ttctgcaca t 21

<210> 111
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 111

ggattctaatt acgactcact atagggctgc ccgcaacccc ttcaactg 48

<210> 112

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 112

ctatgaaatt aaccctcact aaagggaccg cagctgggtg accgtgta 48

<210> 113

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 113

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<210> 114

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 114

ctatgaaatt aaccctcact aaagggactc gagacaccac ctgaccca 48

<210> 115

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 115

ggattctaatt acgactcact atagggccca aggaaggcag gagactct 48

<210> 116

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide probe

<400> 116

ctatgaaatt aaccctcact aaagggacta gggggtggga atgaaaag 48

<210> 117

<211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 117
 ggattctaatt acgactcact atagggcccc cctgagctct cccgtgta 48

 <210> 118
 <211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 118
 ctatgaaatt aaccctcact aaaggaagg ctcgccactg gtcgtaga 48

 <210> 119
 <211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 119
 ggattctaatt acgactcact atagggcaag gagccgggac ccaggaga 48

 <210> 120
 <211> 47
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 120
 ctatgaaatt aaccctcact aaagggaggg ggccttggt gctgagt 47